

# UNOCAL MATERIAL SAFETY DATA SHEET

Product Name: 7309-K-1 Baghouse Dust  
Product Code: None

Page 1 of 9

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: 7309-K-1 Baghouse Dust  
Product Code: None  
Generic Name: Carbon  
Chemical Family: Carbon  
  
Responsible Party: Chicago Carbon Company  
12308 South New Avenue  
Lemont, Illinois  
60439

For further information contact MSDS Coordinator  
7:30am - 4pm Central Time, Mon - Fri: 630-257-7751

### EMERGENCY OVERVIEW

#### 24 Hour Emergency Telephone Numbers:

<u>For Chemical Emergencies:</u>	<u>For Health Emergencies:</u>
Spill, Leak, Fire or Accident	California Poison
Call CHEMTREC	Control System
North America: (800)424-9300	Cont. US: (800)356-3129
Others: (703)527-3887(collect)	Outside US: (415) 821-5338

**Health Hazards:** Contains components that are cancer hazards. Use ventilation adequate to keep exposures below recommended limits (see Section 2). Avoid breathing dust. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling.

**Physical Hazards:** This material may burn. Keep away from all sources of ignition.

< Physical Form: Fine powder with lumps  
< Appearance: Light/Dark Gray with slight yellow tint  
< Odor: None to slight sulfur  
<

NFPA HAZARD CLASS:	Health:	2 (Moderate)
	Flammability:	1 (Slight)
	Reactivity:	0 (Least)

Issue Date: 01/07/00  
Revised Sections: 2

Status: Final Revised

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust

Product Code: None

Page 2 of 9

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>HAZARDOUS COMPONENTS</u>	<u>% Weight</u>	<u>EXPOSURE GUIDELINE</u>		
		<u>Limits</u>	<u>Agency</u>	<u>Type</u>
Coke, Calcined CAS# 64743-05-1	100	(See: Nuisance Dust, If Generated)		
Sulfur CAS# 7704-34-9	4-10	(See: Nuisance Dust, If Generated)		
Vanadium Compounds (as Vanadium Pentoxide) CAS# Various	1-2	0.5 mg/m3	OSHA	CEIL-Resp.
		0.1 mg/m3	OSHA	CEIL-Fume
		0.05 mg/m3	ACGIH	TWA-Resp.
		0.05 mg/m3	Cal.OSHA	TWA-Resp
		0.5 mg/m3	MSHA	TWA
Calcium Compounds CAS# Various	0-2	(See Nuisance Dust, If Generated)		
Nickel Compounds CAS# Various	0-0.3	0.2 mg/m3	ACGIH	TWA
		1 mg/m3	OSHA	TWA
		1 mg/m3	MSHA	TWA
		1 mg/m3	Cal.OSHA	TWA
Lead Compounds CAS# Various	0-0.2	0.05 mg/m3	ACGIH	TWA
		0.05 mg/m3	OSHA	TWA
		0.15 mg/m3	MSHA	TWA
		0.05 mg/m3	Cal.OSHA	TWA
Nuisance Dust, If Generated CAS# None		10 mg/m3	ACGIH	TWA-Tot.
		3 mg/m3	ACGIH	TWA-Resp.
		15 mg/m3	OSHA	STEL-Tot.
		5 mg/m3	OSHA	TWA-Resp.
		10 mg/m3	MSHA	TWA
		10 mg/m3	Cal.OSHA	TWA-Tot.
		5 mg/m3	Cal.OSHA	TWA-Resp.

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

**3. HAZARDS IDENTIFICATION****POTENTIAL HEALTH EFFECTS:**

Issue Date: 01/07/00

Status: Final Revised

Revised Sections: 2

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust

Product Code: None

Page 3 of 9

**Eye:** Eye irritant. Contact may cause stinging, watering, redness and swelling.

**Skin:** Skin irritant. Contact may cause redness, itching, burning, and skin damage. No harmful effects from skin absorption are expected.

**Inhalation (Breathing):** No data available.

**Ingestion (Swallowing):** Low to moderate degree of toxicity by ingestion.

**Signs and Symptoms:** Repeated overexposure to dusts may result in irritation of the respiratory tract, pneumoconiosis (dust congested lungs), pneumonitis (lung inflammation), coughing and shortness of breath. Other effects of overexposure may include headaches, runny nose, vomiting, diarrhea, abdominal pain and chest pain.

**Cancer:** Components are cancer hazards (see Section 11).

**Target Organs:** There is limited evidence from animal studies that overexposure may cause injury to the lungs (see Section 11).

**Developmental:** No data available.

**Other Comments:** This material contains vanadium compound(s) of unknown composition. Effects related to overexposure to certain vanadium compounds may include headaches, wheezing, metallic taste, green tongue, abdominal cramping, an allergic skin reaction through repeated contact, and pulmonary edema (accumulation of fluid in the lungs). Symptoms of vanadium toxicity may be delayed in onset form 1-2 days after exposure.

Allergic skin responses after repeated contact with dusts have been reported, but are not common.

**Pre-Existing Medical Conditions:** Conditions aggravated by exposure may include respiratory (asthma-like) disorders.

## 4. FIRST AID MEASURES

**Eye:** Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush

Issue Date: 01/07/00

Status: Final Revised

Revised Sections: 2

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust

Product Code: None

Page 4 of 9

affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

**Skin:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

**Ingestion (Swallowing):** If swallowed, seek emergency medical attention. If victim is drowsy or unconscious and vomiting, place on the left side with the head down and do not give anything by mouth. If victim is conscious and alert and ingestion occurred within the last hour, vomiting should be induced for ingestions of large amounts (more than 5 ounces in an adult) preferably under direction from a physician or poison center. If possible, do not leave victim unattended and observe closely for adequacy of breathing.

## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** Flash Point: Not applicable  
OSHA Flammability Class: Not applicable  
LEL/UEL: Not applicable  
Autoignition Temperature: No data  
Burn Rate (solids): No data

**Unusual Fire & Explosion Hazards:** This material may burn, but will not ignite readily.

**Extinguishing Media:** Dry chemical, carbon dioxide, foam or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in

Issue Date: 01/07/00

Status: Final Revised

Revised Sections: 2

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust

Product Code: None

Page 5 of 9

enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapors. Cool equipment exposed to fire with water, if it can be done with minimal risk.

### 6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons down wind of spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Notify fire authorities and appropriate federal, state, and local agencies. Immediate cleanup of any spill is recommended. If spill/release in excess of EPA reportable quantity is made into the environment, immediately notify the National Response Center (phone number 800-424-8802).

### 7. HANDLING AND STORAGE

**Handling:** The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Section 2 & 8). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice.

**Storage:** Material should be stored to minimize dust formation. Material can be stored in appropriate containers for use or treated with wetting agent or water. Keep away from incompatible material (see Section 10).

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required.

Issue Date: 01/07/00

Revised Sections: 2

Status: Final Revised

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust  
Product Code: None

Page 6 of 9

### Personal Protective Equipment (PPE):

**Respiratory:** A NIOSH/MSHA approved air purifying respirator with a type 100 particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2). Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**Skin:** The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation, absorption, and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and/or arm covers may be necessary.

**Eye/Face:** Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

**Other Protective Equipment:** A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm).

Flash Point: No Data

Flammable/Explosive Limits (%): LEL/UEL: No Data

Autoignition Temperature: No data

Burn Rate (solids only): No data

Appearance: Steel gray to black particles

Physical State: Fines with some lumps

Odor: None to slight sulfur

PH: 4 (as slurry)

Vapor Pressure (mm Hg): No data

Vapor Density (air=1): No data

Issue Date: 01/07/00  
Revised Sections: 2

Status: Final Revised

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust  
Product Code: None

Page 7 of 9

Boiling Point: No Data  
Freezing/Melting Point: No data  
Solubility in Water: No data  
Specific Gravity: No data

### 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions of storage and handling.

**Conditions To Avoid:** None known

**Incompatible Materials:** Avoid contact with strong oxidizing agents.

**Hazardous Decomposition Products:** Combustion can yield major amounts of oxides of carbon and minor amounts of oxides of sulfur.

**Hazardous Polymerization:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

#### Coke, Calcined (CAS#64743-05-1)

**Target Organ(s):** Repeated exposure of rats to 10 and 30 mg/m<sup>3</sup> petroleum coke dust for two years resulted in signs of lung injury including fibrosis (Scarring of lung tissue). Similar exposures in monkeys caused no significant lung effects.

#### Lead Compounds (CAS# Various)

**Carcinogenicity:** Chronic oral ingestion of various inorganic lead compounds resulted in increased renal tumors in laboratory animals. Lead and inorganic lead compounds have been identified as carcinogens by IARC, NTP, and OSHA.

#### Vanadium Compounds (CAS# Various)

**Target Organ(s):** Mice and rats demonstrated histopathologic changes in lungs and decreased growth rate when exposed to 1 to 3 mg/m<sup>3</sup> vanadium pentoxide for 3 months but adverse effects were not detected in either species similarly exposed to 0.1 to 0.4 mg/m<sup>3</sup>.

#### Nickel Compounds (CAS# Various)

**Carcinogenicity:** Nickel and nickel compounds are known human

Issue Date: 01/07/00  
Revised Sections: 2

Status: Final Revised

## UNOCAL

Product Name: 7309-K-1 Baghouse Dust

Product Code: None

Page 8 of 9

carcinogens and chronic exposure to nickel and nickel compounds is associated with cancer of the lung and nasal cavity. Nickel and nickel compounds have been identified as a carcinogen by NTP and IARC.

### 12. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not an RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity prior to disposal for the potential characteristic of lead (D008) (40 CFR 261). Use resulting in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

### 13. TRANSPORT INFORMATION

Hazard Class or Division: This material is not handled or shipped as an individual product.

### 14. REGULATORY INFORMATION

This material contains no chemicals subject to the reporting requirements of **SARA 313** and 40 CFR 372:

COMPONENT	CAS NUMBER	WEIGHT %
Vanadium Compounds	Various	1-2
Nickel Compounds	Various	0-0.3
Lead Compounds	Various	0-0.2

**Warning:** This material contains the following chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm, and are subject to the requirements of **California Proposition 65** (CA Health & Safety Code Section 25249.5):

COMPONENT	EFFECT
Nickel and Certain Nickel Compds.	Cancer

Issue Date: 01/07/00

Status: Final Revised

Revised Sections: 2

UNOCAL

Product Name: 7309-K-1 Baghouse Dust  
Product Code: None

Page 9 of 9

Lead Compounds Cancer

This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

EPA (CERCLA) Reportable Quantity: --None--

**15. DOCUMENTARY INFORMATION**

Issue Date: 01/07/00  
Previous Issue Date: None  
Product Code: None  
Previous Product Code: None

**16. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

The information in this document is believed to be correct as of the date issued. **HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.** This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

Issue Date: 01/07/00  
Revised Sections: 2

Status: Final Revised